

US Pixel Meeting

Monday 29 August 2016

Cabled I-Beam mock-up

P. Grenier (SLAC), Neil, Matt, Charlie, Jessica, Mike, Jason, etc....

Cabled I-Beam Mock-up

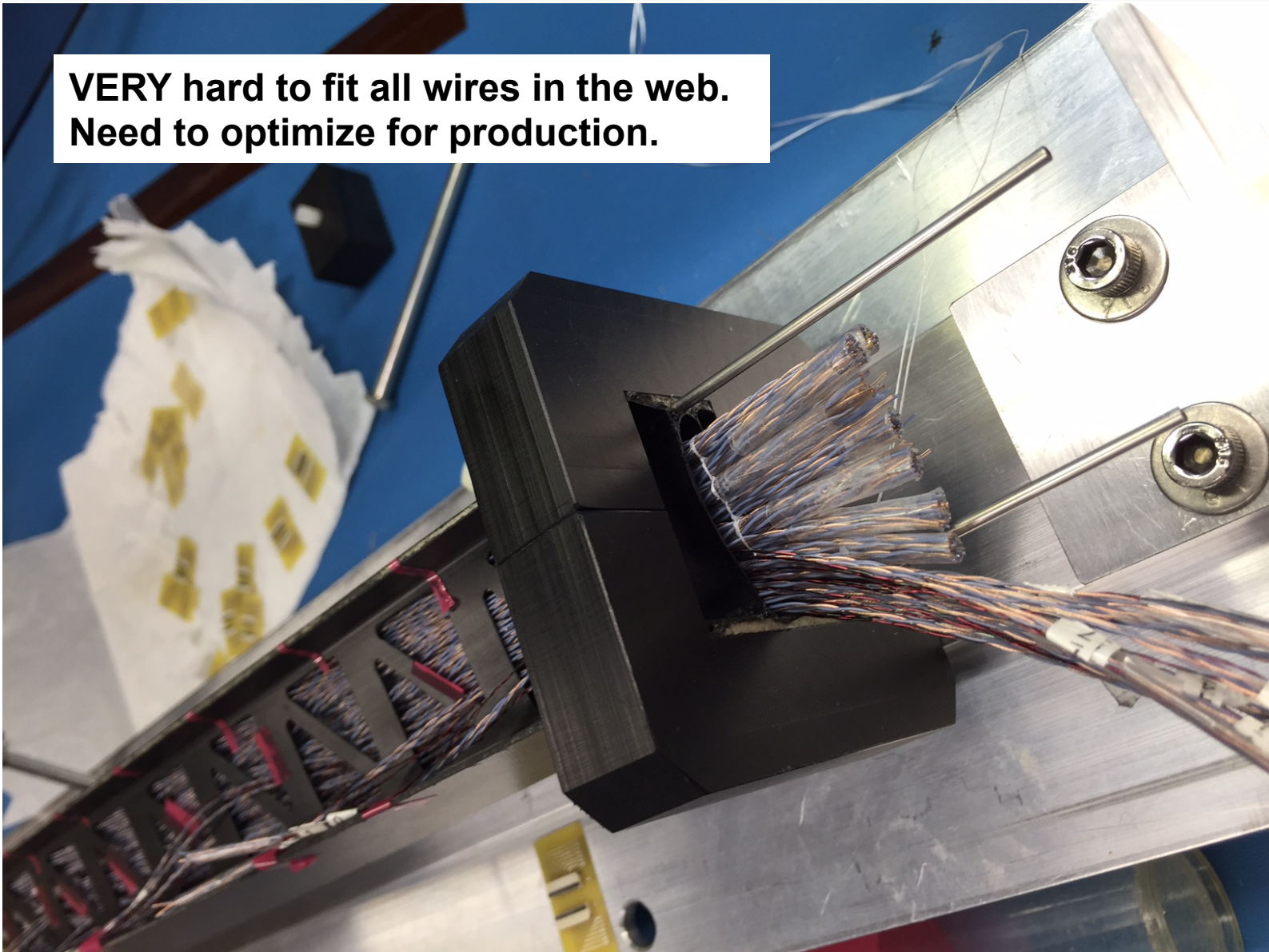
- Have a cabled I-Beam mock up for the ITk Week in Valencia.
- 10 modules on each side: 10 2x2 and 10 2x1 (from ANL).
- Understand/Optimize routing of services: from Modules to End Of Stave.
- Each module: 4x twisted wire pairs: 2x data out, 1x data in, 1x HV.
- Made bundles for each module – Route bundles inside I-Beam web.
- Other option, used by CMD5: ribbon of loomed wires.

Cabled I-Beam Mock-up



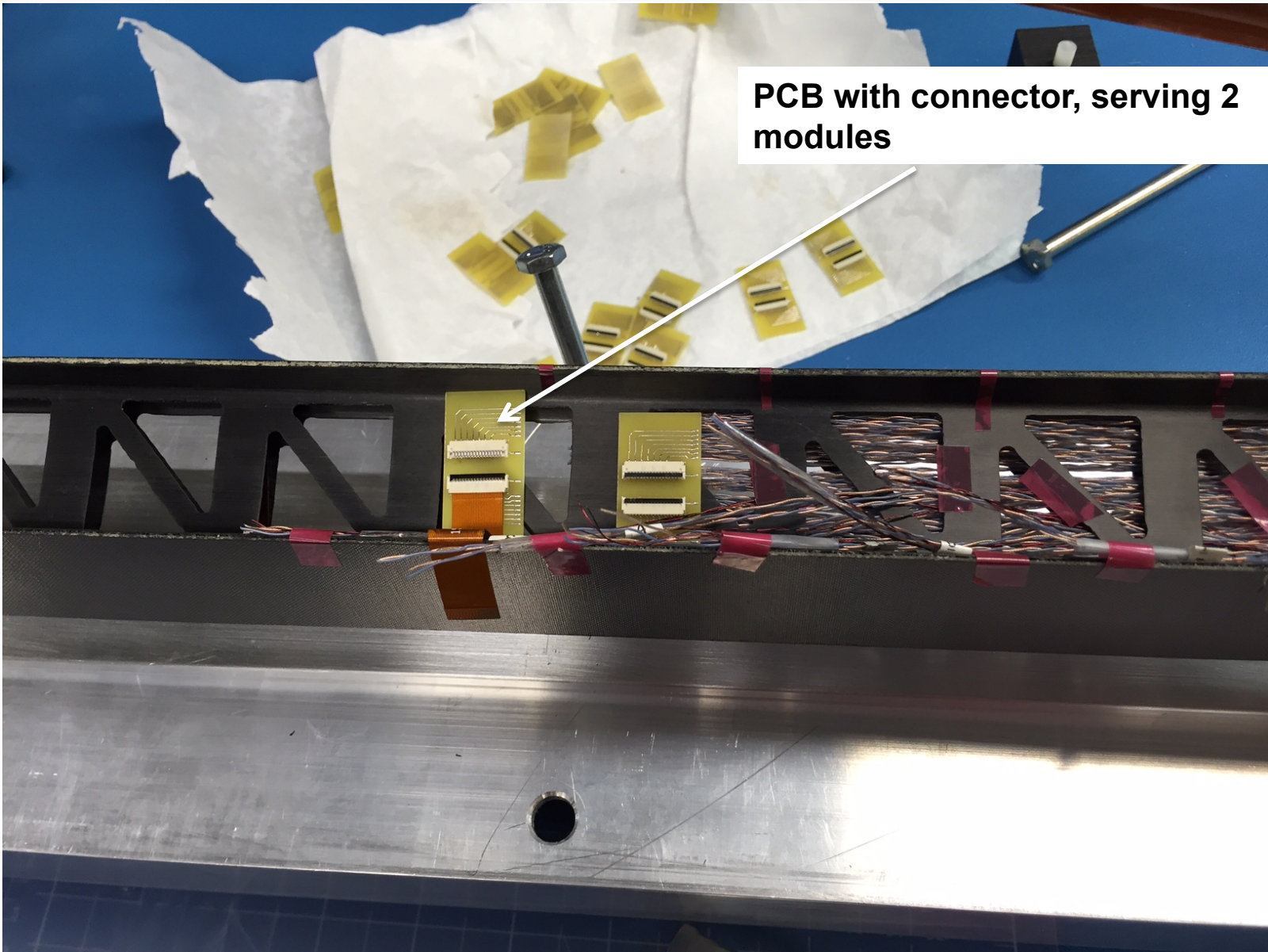
Cabled I-Beam Mock-up

**VERY hard to fit all wires in the web.
Need to optimize for production.**

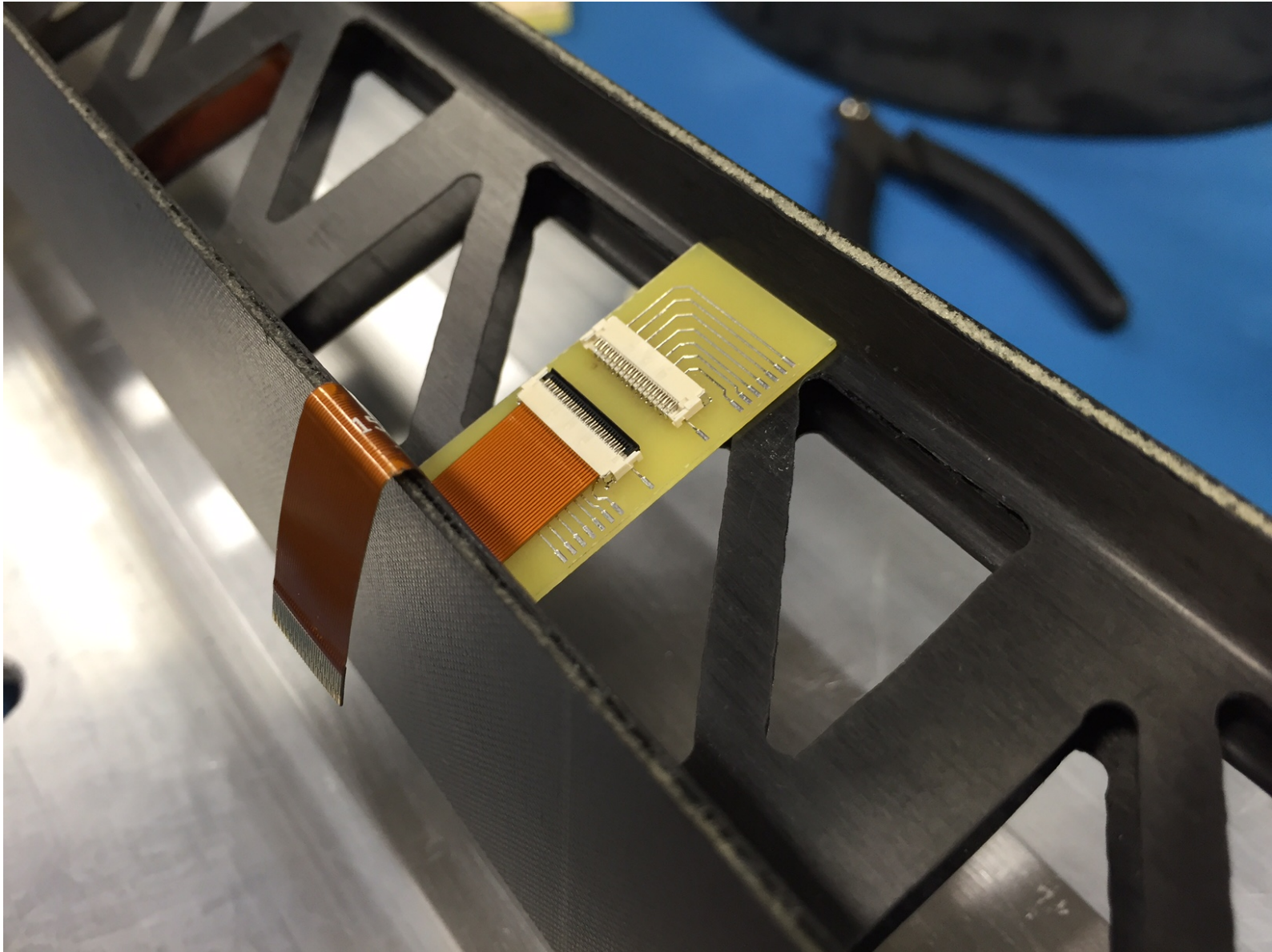


Cabled I-Beam Mock-up

PCB with connector, serving 2 modules

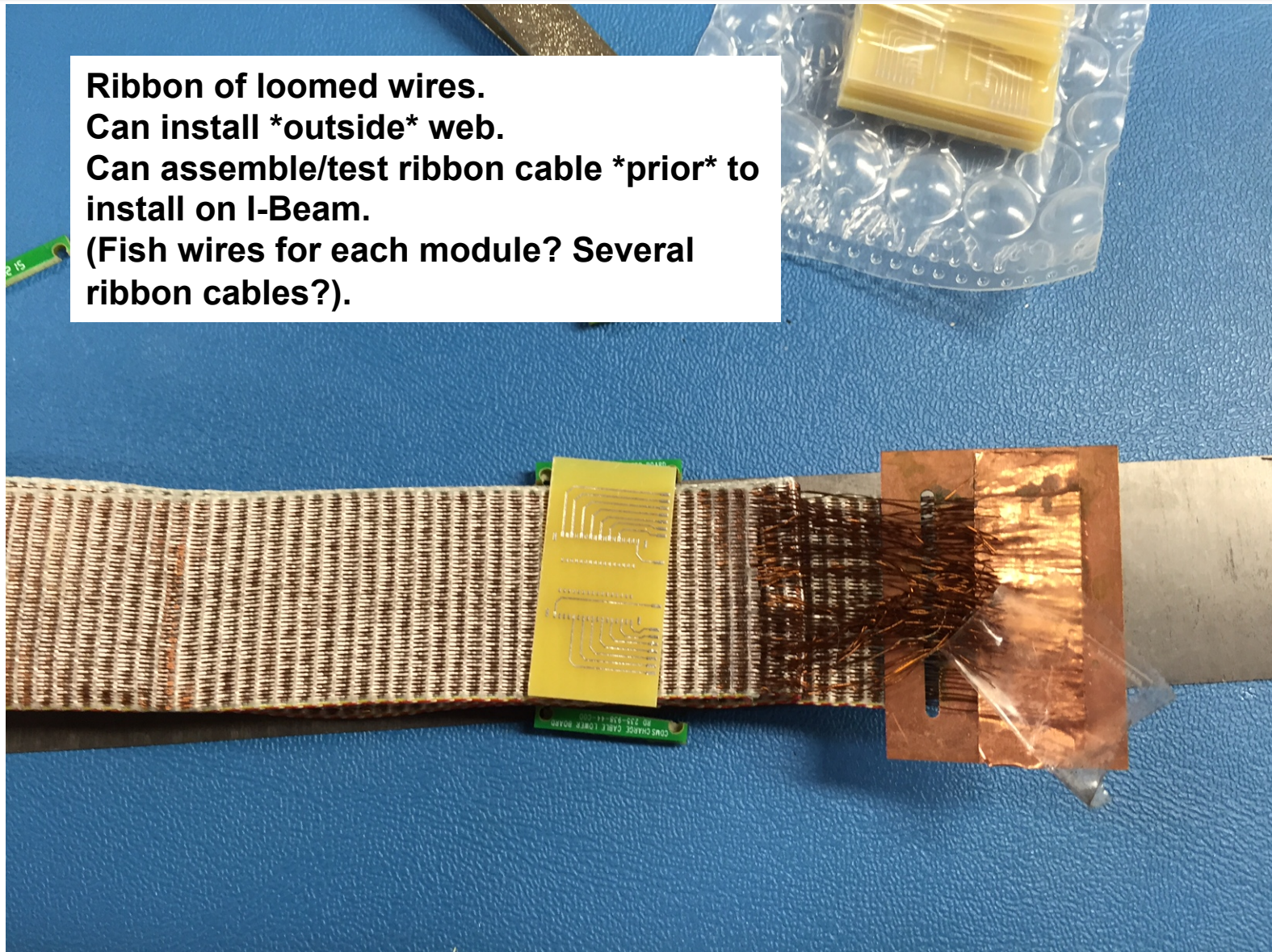


Cabled I-Beam Mock-up



Cabled I-Beam Mock-up

Ribbon of loomed wires.
Can install *outside* web.
Can assemble/test ribbon cable *prior* to
install on I-Beam.
(Fish wires for each module? Several
ribbon cables?).



Cabled I-Beam Mock-up

